

Some New Exotic Parasitic Hymenoptera.

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Prof. T. D. Alfken, Assistant Entomologist in the Städtisches Museum für Natur-, Völker- und Handelskunde at Bremen, by the direction of the Director, Dr. Hugo H. Schauinsland, has recently sent me for determination a small but interesting collection of parasitic Hymenoptera, among which were a few new forms collected by the Director and himself in the Chatham Islands, east of New Zealand.

The latter were of especial interest to me, because I have been working up recently the parasitic Hymenoptera taken some years ago by Mr. Albert Koebele in Australia and New Zealand, as well as a lot of bred material received from Mr. W. W. Froggatt, the Government Entomologist at Sydney, New South Wales.

The new species and genera received from Dr. Schauinsland are described below.

Superfamily VII, CHALCIDOIDEA.

Family LXXI, EULOPHIDÆ.

EULOPHUS Geoffroy.

(1) **Eulophus albitarsis** n. sp.

♀.—Length 2.4 mm. Æneous black, the metathorax sometimes with a metallic green lustre. The head and thorax, including the scutellum, shagreened or reticulate, and clothed with some sparse black hairs; mesopleura on posterior half smooth and polished, but anteriorly reticulate; metathorax short, smooth, shining, with a median elevation and an acute ridge laterally, the latter fringed with long white hairs; spiracles large, oval. The head is transverse and thin, antero-posteriorly the temples being narrow; the face is concave for the reception of the antennæ, which are inserted *far* anteriorly, and 8-jointed; the scape is slender, but does not quite reach to the front ocellus, is about half as long as the flagellum, with the pedicel united, and of an æneous black color; the flagellum is dull black; the pedicel obconical, smooth and longer than thick; the funicle joints gradually become shorter and shorter, the first, the longest, being slightly longer than the pedicel. Legs æneous black, the knees and the anterior tibiæ beneath reddish or dark honey-yellow, while all the tarsi, except one or two terminal joints, are pale honey-yellow or whitish. Abdomen æneous black, oval, wider than the thorax, and as long as or slightly longer than the head and thorax united, the segments

showing greenish bands in certain lights, especially if viewed obliquely in a bright light ; the first segment is the longest, often metallic, the following segments, except the sixth, which is very short, subequal in length.

Hab.—Europe and North America.

Described from 5 ♀ specimens ; one taken November 1, 1899, on a window in Bremen, and 4 specimens taken by myself on a window-pane in Washington, D. C.

Superfamily VIII, **ICHNEUMONOIDEA**.

Family LXXVI, **ICHNEUMONIDÆ**.

Subfamily II, **CRYPTINÆ**.

Tribe II, *Phygadeuonine*.

BATHYMETIS Förster.

(2) **Bathymetis antipoda** n. sp.

♀.—Length 4.2 to 4.5 mm. Head and thorax polished black ; mandibles, except the teeth, which are black, the scape, the pedicel and the flagellum beneath to beyond the middle, the legs entirely, except the hind coxæ, which are more or less dusky, and the abdomen, except the petiole or first segment, which is black, pale rufous ; the anterior and middle coxæ and trochanters paler or yellowish ; antennæ above brown-black. Antennæ 19-jointed, the joints of the flagellum gradually shortening to the last, the first joint the longest, a little more than thrice as long as thick, at apex being narrowed towards base, the second about thrice as long as thick, the third still shorter and so on ; the last joint is about as long as the third flagellum joint. The head and thorax, although polished and shining, are microscopically punctate, the prothorax with some lineations laterally, while the strong ridge bounding the mesopleura anteriorly presents some lineations and punctures within ; metathorax strongly areolated, subrugose at sides, the hind angles subdentate, the spiracular and middle lateral area confluent, while the spiracles are small and round. Abdomen highly polished, impunctate, the petiole being about as long as the hind femur, the second segment about two-thirds the length of the petiole and a little longer than the third, the fourth segment shorter than the third, twice as wide as long and a little longer than the fifth, the sixth and seventh segments very short, united shorter than the fifth. Wings hyaline, the tegulæ brownish yellow, the large triangular stigma and the veins black or brown-black ; the submedian cell is longer than the median, the areolet pentagonal, the outer nervure of same subobsolete or whitish hyaline ; while the disco-cubital vein is broken by a scarcely perceptible stump of a vein before the middle of the third discoidal cell.

Hab.—Chatham Island.

Described from 2 ♀ specimens.

Family LXXVII, ALYSIIDÆ.

The discovery of the curious genus *Lysiognathus* Ashm., with the mandibles, etc., agreeing with *Alysia* and allies, but with two recurrent nervures, has induced me finally to treat the Alysiinæ and the Dacnusinæ as a distinct family apart from the Braconidæ, since, as was suggested by Dr. Theodore Gill at the time my paper on *Lysiognathus* was read before the Washington Entomological Society, I believe now that the limber and distended jaws of these insects are of more taxonomic value than the number of recurrent nervures in the front wings.

Three distinct subfamilies are recognized in the family, separated as follows :

- Front wings with only one recurrent nervure, or the species are apterous 2.
 Front wings with two recurrent nervures . Subfam. I, LYSIOGNATHINÆ.
 2. Front wings with *three* cubital cells; or if with two only, the first transverse cubitus is wanting; species sometimes apterous or subapterous Subfam. II, ALYSINÆ.
 Front wings with *two* cubital cells, the third transverse cubitus always wanting; species never apterous . Subfam. III, DÆNUSINÆ.

Subfamily II, ALYSINÆ.

Tribe II, *Alwini*.**ASOBARA** Förster.(3) **Asobara antipoda** n. sp.

♀.—Length 3 mm. Ovipositor hardly two-thirds the length of the abdomen. Head, two basal joints of antennæ, upper part of prothorax and slightly at sides, the mesonotum, the scutellum and the legs brownish yellow or pale rufous; rest of antennæ, the thorax and abdomen shining black; palpi and tegulæ whitish; teeth of mandibles blackish at tips; wings hyaline, ciliate, the stigma and veins dark brown. The antennæ are broken off at tips, but were evidently longer than the body; the second joint of the flagellum is the longest joint, being considerably longer than the first, as well as distinctly longer than the third; the third and fourth joints are about equal, while those beyond are slightly shorter; all are bearded with short, sparse hairs. The entire body, except a small triangular space behind the insertion of the hind wing, which is rugose or wrinkled, is polished, shining and impunctate; the mesonotum has a median longitudinal fovea posteriorly just in front of the scutellum, the latter being convexly elevated with a broad, crenate furrow at base;

the metathorax has a distinct median carina, with the spiracles moderately large and rounded. The marginal cell in the front wings is very large and extends clear to the tip of the wing, while the submedian cell is a little longer than the median, and the second discoidal cell is open at apex below.

Hab.—Chatham Island.

Described from 1 ♀ specimen.

Family LXXVIII, BRACONIDÆ.

Among the material from Chatham Island, I find a new Braconid genus represented by three distinct species. Its position and distinctive characters may be best shown by reproducing from my forthcoming monograph on the North American Braconidæ, my generic table of the group to which it belongs.

Subfamily VI, HELCONINÆ.

Tribe I, *Helconini*.

TABLE OF GENERA.

- | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|
| Abdomen attached to the metathorax far above the hind coxæ | 1. |
| Abdomen attached normally. | |
| Hind femora beneath <i>unarmed</i> | 2. |
| Hind femora beneath <i>armed</i> with one or more teeth. | |
| Hind femora armed with many small teeth beneath; recurrent nervure joining the second cubital cell (Sarawac). | |
| (1) Euscelinus Westw. | |
| Hind femora armed with one tooth beneath; recurrent nervure joining the first cubital cell | (2) Helcon Nees.* |
| 2. Recurrent nervure joining the first cubital cell. | |
| Second cubital cell not longer than wide, usually <i>wider</i> than long; clypeus at apex rounded | 3. |
| Second cubital cell always longer than wide; clypeus at apex truncate. | |
| Basal joint of hind tarsi <i>not</i> longer than joints 2-4 united; median cell in hind wings <i>not</i> or scarcely shorter than the costal cell. | |
| (3) Gymnoscelis Först. | |
| Basal joint of hind tarsi longer than joints 2-4 united; median cell in hind wings much shorter than the costal cell | (4) Eumacrocentrus Ashm., n. g. (type <i>H. americanus</i> Cr.). |
| 3. Submedian and median cells in front wings of an equal length; second cubital cell petiolate, <i>not</i> longer along the radius than along the cubitus, if anything a little shorter | (5) Aspicolpus Wesm. |

* Mr. Peter Cameron has recently rechristened this well-known genus under the name *Wroughtonia*, vide Mem. and Proc. Manchester Lit. and Phil. Soc., vol. 43, 1899, p. 56.

Submedian cell considerably longer than the median ; second cubital cell sessile, or at most subsessile and *longer* along the radius than along the cubitus, so as to appear obtrapezoidal.

(6) **Schauinslandia** Ashm. n. g. (Type *S. femorata* Ashm.).

4. Recurrent nervure interstitial or joining the first cubital cell ; first discoidal cell longly petiolate ; second cubital cell not large.

(7) **Cenocælius** Hal.

= **Aulacodes** Cr.

= **Laccophrys** Först.

= **Capitonus** Br.

= **Promachus** Marshall.*

SCHAUINSLANDIA Ashmead, n. g.

The affinities of this new genus is clearly with *Helcon* and *Cenocælius*, and with the exception of the attachment of the abdomen, shows the closest relation with the latter genus. Its generic characters and its position in the group, are, I think, clearly brought out in my table, and little more may be said of it: *the head is large, quadrate or subquadrate ; mandibles bidentate, the upper tooth the longer ; maxillary palpi long, 5-jointed, the first joint the shortest, the third the longest, the second somewhat dilated towards one side at base ; labial palpi 4-jointed, much shorter ; antennæ 16-jointed in S. femorata, the first and last joints of flagellum the longest, about equal in length ; mesonotal furrows distinct ; scutellum with a crenate furrow across the base ; metathorax not or very incompletely areolated. Wings similar in venation to Aspicolpas Wesmæel, but with the submedian cell much longer than the median, and with the second cubital cell quite differently shaped, being obtrapezoidal, never quadrate.*

This genus is dedicated to the distinguished Director of the Museum, Dr. Hugo Hermann Schauinsland.

(4) **Schauinslandia femorata** n. sp.

♀.—Length 5 to 6 mm. Head, except a spot on the vertex, the antennæ, except the last three joints, the abdomen and the legs *mostly* ferrugineous ; spot on vertex, enclosing the ocelli and extending forward to the base of the antennæ, black ; palpi, trochanters and tarsi white ; hind coxæ black ; hind femora dark red, their tibiæ fuscous. The frontal depression of the head is transversely wrinkled, but with a distinct median

* Mr. Marshall claims the genus *Promachus* Marshall was never published. I dispute this ; the name was published in 1887, in a table furnished by him for Cresson, *vide* Cresson's Synopsis of N. A. Hym., p. 61, line 23.

grooved line extending from the front ocellus to the base of the antennæ. The thorax, except sutures anteriorly and in and along the parapsidal furrows, and the scutellum, which are reddish, is black; the surface is smooth, but still sparsely microscopically punctate; the metathorax is somewhat rugoso-punctate, with slight indications of irregularly formed carinæ at base and laterally. Wings hyaline, the stigma and veins black or mostly black, the costal vein within towards base and the median and submedian veins in both wings are more or less testaceous basally. Abdomen a little shorter than the head and thorax united, sessile, but narrowed towards base, the surface, except the first segment, which is roughened and striate at basal two-thirds, is smooth and polished; the first and second segments are long, nearly equal in length, the second being somewhat the longer; the third, fourth and fifth segments are short, nearly equal in length, but all united shorter than the first; the following segments are more or less retracted; ovipositor hardly as long as the abdomen, the sheaths black.

Hab.—Chatham Islands.

Described from 2 ♀ specimens.

(5) *Schaninslandia alfkenii* n. sp.

♂.—Length about 4 mm. Head, the thorax, except the pronotum at the sides, and the abdomen black; mandibles rufous, with black teeth; palpi white; first joint of antennæ, the tegulæ, and the legs, except the hind tibiæ outwardly at base and apex and the hind tarsi, brownish yellow; hind tibiæ outwardly at base and apex and their tarsi dark fuscous, almost black. The head and the thorax are sparsely punctate; the mesonotum is rugosely punctate in the depression at termination of the parapsidal furrows; the scutellum has a crenate furrow across the base, while the metathorax is distinctly and rather closely punctate, but without even traces of carinæ. Wings hyaline.

Hab.—Chatham Islands.

Described from 1 ♂ specimen.

(6) *Schaninslandia pallidipes* n. sp.

♀.—Length about 3.5 mm. Black and shining, but distinctly, although somewhat sparsely punctate, the prothorax alone ferruginous or testaceous; tegulæ and legs, except the last joint of the tarsi, uniformly pale yellowish. The thorax is similar to that of *S. alfkenii*, except the mesonotum is sparsely, minutely punctate, without the rugoso-punctate depression posteriorly. Wings hyaline, the large triangular stigma and the veins brown, not black; otherwise as in *alfkenii*. Abdomen subpetiolate, the first segment narrower than in *S. femorata* and punctate for four-fifths its length; rest of abdomen smooth, shining, the second dorsal segment having a rufous tinge towards base. The ovipositor in the single specimen is exerted to more than the length of the abdomen, but

the body sheaths are distinctly shorter than the abdomen. Dorsal segments 2-6 are subequal in length and quite different from *S. femorata*.

Hab.—Chatham Islands.

Described from 1 ♀ specimen.

Subfamily XVI, RHOGADINÆ.

Tribe IV, *Doryctini*.

DORYCTOMORPHA Ashmead, n. g.

This interesting new genus is allied to *Cænopachys* Förster and *Doryctes* Haliday; but tabulated it may be easily separated from them and their allies as follows:

Second abdominal segment above blending with the third, *not* separated by a strong transverse suture or furrow 2.

Second abdominal segment above separated from the third by a more or less strong transverse suture or furrow **Odontobracon** Cam.,

Hedysoma Först., **Rhaconotus** Reinh.

2. Basal joint of hind tarsi not longer than the four following joints united, always much shorter; antennæ very long 3.

Basal joint of hind tarsi about twice as long as the four following joints united; antennæ very short **Histeromerus** Wesm.

3. Wingless species 5.

Winged species.

Recurrent nervure joining the first cubital cell or interstitial with the first transverse cubitus 4.

Recurrent nervure joining the second cubital cell.

Second and third abscissæ of the radius and the cubitus abnormally thickened; hind wings *without* an anal cell.

Cænopachys Först.

Second and third abscissæ of the radius and the cubitus normal, *not* thickened; hind wings *with* an anal cell. **Doryctomorpha** Ashm. n. g. (Type *D. antipoda* Ashm.).

4. Abdominal segments *without* arcuate punctate lines at the most with transverse or oblique impressed lines.

Second abdominal segment *without* deep oblique impressed lines; hind wings in the ♂ *without* a stigma.

Submedian cell longer than the median; abdomen sessile.

Metathorax areolated or at least always with a complete areola. **Ischiogonus** Wesm.

Metathorax *not* areolated, the areola wanting, or if at all indicated, always confluent with the petiolar area **Doryctes** Hal.

Submedian cell *not* longer than the median; abdomen distinctly petiolate or the first segment very long, petioliform.

Stenophasmus Smith.

Second abdominal segment *with* two distinct oblique impressed lines; hind wings in ♂ *with* a stigma (very rarely without); recurrent nervure not interstitial with the first transverse cubitus **Glyptodoryctes** Ashm.

Abdominal segments with punctate arcuate lines (♂ unknown); recurrent nervure interstitial with the first transverse cubitus.

Bathycentor Kriechb.

(7) **Doryctomorpha antipoda** n. sp.

♀.—Length 3.3 mm. Ovipositor longer than the body. Head and thorax black; abdomen above dark brownish piceous, almost black, beneath paler; base of mandibles, the palpi, the tegulæ, anterior legs, the middle and anterior coxæ, the trochanters, base of femora, knees and base of hind tibia yellowish white; rest of legs ferruginous or fuscous. Antennæ 2-3 jointed, the scape large and considerably thickened, longer and much thicker than the first joint of the flagellum, which is the longest flagellum joint, and a little more than thrice as long as thick at apex; second flagellum joint about two-thirds the length of the first; the following to the last are shorter and imperceptibly become shorter or smaller, all being delicately fluted from the fifth. Head large, quadrate, coriaceous opaque; thorax shining, but finely, sparsely punctate, the mesopleura with a slight femoral impression, the metathorax not short, its posterior face feebly transversely aciculate and bounded by a prominent carina superiorly, the metanotum thus enclosed and with a poorly defined median carina. Wings hyaline, the stigma and veins brown, the second and third cubital cell large, nearly equal in length, the second receiving the recurrent nervure at its lower basal angle; submedian cell very much longer than the median.

Hab.—Chatham Islands.

Described from 1 ♀ specimen.

Notes on the Distribution of *Podisma variegata* Scudder.

By J. A. G. REHN, Acad. Nat. Sci., Phila.

The recent acquisition of a number of this species by the author induced him to gather together all the data which he could secure concerning this very interesting species. The original description (Rev. Melan, p. 101) was based on two males and one female, from Ithaca and Enfield Falls, Tompkins County, New York, taken at elevations of 400 and 450 feet respectively. Mr. Scudder also mentions having had sent